

The November Meteors. By the Rev. S. J. Perry.

A constant watch for meteors was kept up during the whole night from November 11, until midnight of November 15. On the first two nights the sky was generally about half covered with cloud, on November 13 seven-tenths were obscured, and it was completely overcast on November 14. The moonlight also interfered a good deal in the early hours, but 91 meteors were observed. Of these 14 had trains, and none were coloured. The times of greatest frequency were from 9h. to 12h. on November 11, from 9h. to 16h. on November 12, and from 9h. to 12h. on November 13, the numbers being respectively 22, 37, and 13. The paths were all noted, and but few were found to belong to the stream of the Leonides.

On November 27, between 8h. and 10h., six meteors were seen, three of which were of the 1st magnitude; but during the remainder of the night only two others were observed, although the amount of cloud was seldom more than three-tenths until 2 A.M. on November 28.

*Stonyhurst Observatory,
1873, December 11.*

*Suggestions for a Search for the Small Stars near Uranus, which
Sir W. Herschel may have observed as Satellites.*

By A. Marth, Esq.

(*Extract from a Letter to Mr. Lassell.*)

It may perhaps be worth while to call the attention of those observers who have the opportunity of using sufficiently powerful telescopes, to the favourable chances they may have during the present apparition of *Uranus* of contributing something towards the decisive settlement of the question respecting the existence of Sir William Herschel's additional satellites of the *Georgium Sidus*.

Though there is no positive evidence available in proof of the real existence of these satellites, and though there can be no doubt that Herschel has not been sufficiently cautious in assuming their existence from the very questionable negative evidence at his disposal, it is only right and due to his memory, that this evidence should be fully sifted and his mistaken inferences properly traced to their true sources. You are aware, that, for years past,

I have been desirous and ready to do this, whenever I should get a fair opportunity; but such an opportunity I have not got. The search for the little stars, which Herschel must have mistaken for satellites, may of course be undertaken at any time and by any observer, who can make use of a powerful telescope in a suitable atmosphere, and who will take the necessary trouble. During the present apparition of *Uranus*, however, observers may take part in the search with no more trouble than that of making careful eyedrafts of the groups of stars in the neighbourhood of the planet itself. For, during the next months, the geocentric place of *Uranus* in the heavens will be only some twenty seconds south of that in which it appeared in 1790 at a (less than) three days' later date, so that the planet in its retrograde course will pass on the nights of January 15 and February 6, 1874, the same stars which it passed on the evenings of January 18 and February 9, 1790, and some of which were then supposed to be additional satellites. It seems certainly desirable that the opportunity for recovering these little stars, and also for ascertaining the effect of the neighbourhood of the planet upon their visibility, should not be allowed to slip away unused; and I therefore suggest to you to call attention to it at the next meeting of the Royal Astronomical Society. It may be well to state expressly, that the telescope employed by Herschel in these observations was his 20-foot reflector, so that there are telescopes enough in the world which ought to be capable of showing what he has seen. With which of them, however, *Oberon* and *Titania* may be really observed, and which of them may be capable of at least showing glimpses of *Ariel* and *Umbriel*, is a question, to which at present no answer can be given, but which might be fairly answered, if observers would be good enough to make simple sketches of the groups of stars surrounding the planet and along its track, at every favourable opportunity during the present apparition, and to send their sketches or copies to the Society. I should be most willing to subject these sketches to the needed examination, and to compute the necessary ephemerides of the known satellites. However, in order to leave observers entirely unbiassed, it will be better not to publish ephemerides before-hand. As regards the two faint satellites, *Ariel* and *Umbriel*, it is not likely that they could be seen with any telescope which does not readily show the satellite of *Neptune*, when it is not too far from its greatest elongation; in fact, they do not seem ever to have been really observed except with your own instruments. But I need not say more on the subject now.